Serial No. 10/657,169

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (***Currently amended***) A method [[for]] of manufacturing a piston for a swash plate type compressor with variable capacity, said method being performed on ~~comprising: the step of (A) forming the~~ a first piston member[[(23)]] having a bridge[[(21)]] and [[the]] a first coupling part[[(22)]] extending from the bridge[[(21);]] and a ~~(B) forming the~~ second piston member[[(26)]] having [[the]] a second coupling part[[(24)]] adapted to be coupled with the first coupling part[[(22)]] and [[the]] a hollow part, said method comprising the following steps that are performed in the recited sequence: ~~(25) formed by coupling the first piston member (23) and the second piston member (26) with each other;~~

[[(C)]] rotatably supporting the first and second piston members on ~~(23 and 26) to the~~ first and second supporting parts~~(31a and 31b) after coupling~~ while the first and second piston members are coupled together ~~(23 and 26) temporarily~~;

[[(D)]] friction stir welding the first and second piston members together ~~using friction heat generated by friction contact~~ while rotating the first supporting ~~support~~ part ~~(31a) is rotated~~ at a predetermined speed after a welder ~~welding means(40)~~ is rotatably advanced downwardly and inserted into welded portions ~~to a welding portion~~ of the first and second piston members;

[[(E)]] moving the welder from ~~welding means(40) inserted to~~ the welded ~~portion~~ portions to [[the]] a predetermined position while maintaining contact between the welder and the first piston member after finishing the friction stir welding ~~of the welding portion~~; and

[[(F)]] separating the welder ~~welding means(40)~~ from the first piston member at said predetermined position ~~welded portion~~.

2. (*Currently amended*) A method [[for]] of manufacturing a piston for a swash plate type compressor with variable capacity, said method being performed on ~~comprising: the step of (A) forming the~~ a first piston member[[(23)]] having a bridge[[(21)]] and [[the]] a first coupling part[[(22)]] extending from the bridge[[(21);]] and a ~~(B) forming the~~ second piston member[[(26)]] having [[the]] a second coupling part[[(24)]] adapted to be coupled with the first coupling part[[(22)]] and [[the]] a hollow part, said method comprising the steps of: ~~(25) formed by coupling the first piston member (23) and the second piston member (26) with each other;~~

[[(C)]] aligning a ~~position controlling of the~~ central [[axis]] axial line of the first and second piston members~~(23 and 26) to~~ with that of [[the]] first and second supporting parts~~(31a and 31b)~~ after temporarily coupling the first and second piston members~~(23 and 26)~~ and supporting the first and second piston members~~(23 and 26)~~ on [[the]] support rollers ~~(33) installed~~ elastically supported by a ~~elastic~~ spring;

[[(D)]] supporting the first and second piston members~~(23 and 26) to~~ on the first and second supporting parts~~(31a and 31b) after the position controlling step~~;

[[(E)]] friction stir welding the first and second piston members together ~~using friction heat generated by friction contact~~ while rotating the first supporting ~~support~~ part ~~(31a) is rotated~~ at a predetermined speed after a welder ~~welding means(40)~~ is rotatably advanced downwardly and inserted into welded portions ~~to a welding portion~~ of the first and second piston members;

[[(F)]] moving the welder ~~welding means(40) inserted to the welded portion~~ to [[the]] a predetermined position after finishing the friction stir welding ~~of the welding portion~~; and

[[(G)]] separating the welder ~~welding means(40)~~ from the welded ~~portion~~ portions.

3. (*Currently amended*) [[A]] The method ~~for manufacturing a piston~~ according to claim **1**, wherein the friction stir welding is finished by a single revolution of ~~done by one time rotation of~~ the first and second piston members~~(23 and 26)~~ using the first supporting part[[(31b)]].

4. (*Currently amended*) [[A]] The method ~~for manufacturing a piston~~ according to claim 2, wherein the friction stir welding is finished by a single revolution of ~~done by one-time rotation of~~ the first and second piston members~~(23 and 26)~~ using the first supporting part[[(31b)]].

5. (*Currently amended*) [[A]] The method ~~for manufacturing a piston~~ according to claim 1, wherein the step of moving [[of]] the welder ~~welding means(40)~~ is carried out by moving a table ~~(36) within the~~ a predetermined distance in the axial direction of the piston[[(20)]].

6. (*Currently amended*) [[A]] The method ~~for manufacturing a piston~~ according to claim 2, wherein the step of moving [[of]] the welder ~~welding means(40)~~ is carried out by moving a table ~~(36) within the~~ a predetermined distance in the axial direction of the piston[[(20)]].

7. (*Currently amended*) [[A]] The method ~~for manufacturing a piston~~ according to claim 1, wherein, in the moving step, the welder ~~welding means(40)~~ is moved to the bridge ~~(21) portion~~ of the first piston member[[(23)]] from the welded portions ~~portion(29)~~ by ~~the movement of the~~ moving a table[[(36)]].

8. (*Currently amended*) [[A]] The method ~~for manufacturing a piston~~ according to claim 2, wherein, in the moving step, the welder ~~welding means(40)~~ is moved to the bridge ~~(21) portion~~ of the first piston member[[(23)]] from the welded portions ~~portion(29)~~ by ~~the movement of the~~ moving a table[[(36)]].

9. (*Currently amended*) [[A]] The method ~~for manufacturing a piston~~ according to claim 2, wherein the support rollers[[(33)]] are raised ~~lifted~~ or lowered by an ascent and descent member[[(53)]] which is connected to the lower side of a supporting member[[(34)]] supporting

the [[both]] support rollers[[(33)]] and is elastically supported by the ~~elastic~~ spring[[(52)]].

10. ***(Currently amended)*** [[A]] The method ~~for manufacturing a piston~~ according to claim 2, wherein the aligning step is performed ~~position controlling of the central axis line of the first and second piston members(23 and 26) to that of the first and second supporting parts(31a and 31b) is done~~ in a state wherein [[which]] the upper surface of the second piston member[[(26)]] elastically supported by the support rollers[[(33)]] is pressurized by a position controlling guide member[[(60)]] installed at the upper side of the second supporting part[[(31b)]].

11. ***(Currently amended)*** [[A]] The method ~~for manufacturing a piston~~ according to claim 2, after the supporting step ~~of the first and second piston members(23 and 26)~~, further comprising [[a]] the step of fixing [[the]] an ascent and descent member[[(53)]] by moving [[the]] a fixing element ~~means(70)~~ driven by a driving element ~~means(77)~~ to the lower side of the ascent and descent member[[(53)]] and contacting ~~having~~ the upper surface of the fixing element ~~means (70) contacted~~ with the lower side of the ascent and descent member[[(53)]] to fix ~~the lower portion of~~ the ascent and descent member,[[(53)]] which is elastically supported ~~installed~~ by the ~~elastic~~ spring,[[(52)]] under the support rollers[[(33)]].

12. **(new)** The method according to claim 1, wherein no residual hole is formed by the welder on the welded portions of the first and second piston members.